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Sensitivity, or Laboratory, Training in Industry

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Much has been written regarding the design and effectiveness of sensitivity training. Instead of covering this material again, this paper attempts to make explicit the strategic goals and the rationale of various ways such training has been used in industrial and business organizations. Doing this provides a basis for considering how effective such training has been in doing what it was intended to do in the organizations where it was used.

I. TOWARD A CONCEPTION OF SENSITIVITY TRAINING

A wide variety of activity is called sensitivity training. Training so called varies in length (from a few hours to three weeks), in focus (on personal growth, inter-personal relations, group processes, or team building), in the qualifications of the trainer (from internship and a form of certification in National Training Laboratories (NTL) to self-designation as a trainer); and in participant mix (from strangers to members of a work unit to married couples).[1]

Such diversity in usage of the term has led to considerable confusion, as witnessed by articles which have recently appeared in several popular magazines in which activities as different as nude marathons and in-company team development sessions are referred to as "sensitivity training." Even in technical journals studies purporting to assess the effectiveness of sensitivity training fail to specify the design of the training (Morse and Reimer, 1956; Valiquet, 1968).

To cope with this problem of ambiguity this paper deals only with training conducted by the National Training Laboratories and the behavioral scientists associated with it. The generic name of laboratory training will be used, since it is much more descriptive of the training under discussion, increased sensitivity being but one of the goals of laboratory training.[2]

The goals usually associated with laboratory training are increased awareness (i.e., sensitivity) to self and others, more authentic behavior, increased interest in inquiry, and increased ability to work in a condition of shared influence (Schein and Bennis, 1965).

Training designs which merit the name of laboratory utilize both a face-to-face, largely unstructured group and some planned activities involving interaction among individuals or between groups as vehicles for involving participants in dilemmas. Participants usually respond to the dilemmas with their typical patterns of behavior; but since these tend to be ineffective, participants are motivated to devise new alternative modes of response. Such behaviors, the rationale for them, and their consequences are then examined in a process of feedback; from this generalizations, reformulated concepts, and modified values emerge; and skills appropriate to the new generalizations are practiced (Shepard, 1965).

During 1969 NTL has offered ten different types of laboratories for industrial clients, each type being of at least one week duration. Some designs which are outgrowths from the basic NTL design, but which meet the definition of laboratory training given above, are the Grid Seminars originated and conducted widely by Blake and Mouton (1964, 1968), the Organization Training Laboratory conducted by Morton (Morton and Associates, n.d.; Morton and Bass, 1964), and various forms of "confrontation" meetings between role groups in an organization (Blake and Mouton, 1964, Golembiewski and Blumberg, 1967) or between such groups as union and management (Blake, Mouton, and Sloma, 1965).

It is apparent that laboratory or sensitivity training is much more than *training*—i.e., a way of enhancing skills. Most people utilizing it in industry are behavioral scientists interested in applying findings from research and theory to the solution of practical problems. Furthermore, they are seldom interested in helping people become more effective in their organizations as these organizations are currently functioning; they tend to be interested in *modifying social systems.* And most practitioners tend to be humanitarian in their concern—they want organizations to more fully provide the opportunity for growth and actualization of members at all levels of the organization. As Clark (undated: 11) puts it in describing his own approach

[1]See Schein and Bennis (1965) for a more extensive analysis of the dimensions of laboratory training.

[2]The term "sensitivity training" and the personal-growth emphasis which it involves arose in discussions of the Policy Committee of the Western Training Laboratory (now a part of NTL) in 1953 and was first used in print by Tannenbaum, Kallejian, and Weschler (1954).

> The goal . . . is to create effective sociotechnical systems which support the kind of human encounters in which there is greater likelihood that people's authentic beings will be expressed in relation to one another and their work.

II. LABORATORY TRAINING AS MANAGER DEVELOPMENT

During recent years a distinction has been drawn between programs of *manager* development and programs of *organization* development (Buchanan, 1964b; Blake and Mouton, 1968). In manager development the focus is on facilitating changes in the knowledge, skills, attitudes, etc., of individuals on the assumption that the individual can effect transfer of such learning to his work situation. In organization development the focus is on the culture, practices, procedures, and structures as well as on the development of knowledge, skills, and attitudes of organization members. Laboratory training has been used in both types of programs.

Stranger laboratories

During 1969 approximately 600 people from over 80 different companies took part in one of the ten types of training laboratories which NTL and its affiliates conducted for industrial personnel. Such laboratories are referred to as "stranger" laboratories, in that the participants come from a variety of different companies, are strangers, and have no permanent working relations with one another.

Cousin laboratories

NTL also conducts many laboratories for the personnel of a single company, and many people associated with NTL conduct laboratories for the personnel of individual companies in which case the participants have working relationships. These laboratories may be similar in length and design to the public ones or they may be specifically designed to meet the needs of a particular company.

Team development laboratories

In still other cases a manager and the people who report to him constitute the participants in a laboratory, and the primary focus is on improving the relationships among the members and increasing their ability to solve problems effectively.

Stranger, cousin, and team-development laboratories are frequently used as forms of manager development. How effective are they?

Several studies support the fact that stranger laboratories have an impact. Bunker (1965) collected information from former participants in NTL summer laboratories and from at least seven work associates of the participants ten months following the training. He found that about two-thirds of the participants, compared with one-third of non-trained matched subjects, were described by at least two of their peers as having changed. Smith and Moscow (1966) reported similar findings regarding participation by middle and upper managers in a laboratory conducted at the University of Leeds.

Several other studies provide indication that cousin laboratories produce changes in the job performance of participants beyond those found in peers who did not have the training (Buchanan and Brunstetter, 1959; Boyd and Ellis, 1962; Greiner, 1965; Morton, 1965; and Underwood, 1965). The Boyd and Ellis study is noteworthy in that the frequency and kind of changes made by laboratory participants were compared with those made by participants in a case-study seminar of the same length (two weeks) in the same organization. The findings clearly showed that the laboratory training produced more organizationally relevant changes than the seminar.

Despite the favorable findings regarding the impact of stranger and cousin laboratories when used as a single-phased manager development program, there has long been skepticism among practitioners regarding its value as a single means of job improvement. Such skepticism rests on the fact that an employee at any level is part of a complex, interdependent field of forces and thus any attempted change in the behavior of the individual is likely to engender forces which impede and eventually counteract the change attempt. The classic study by Fleishman, *et al.* (1955) regarding the on-the-job consequences of a well-designed (but non-laboratory) human relations cousins training program for first-line supervisors supports this view. Practitioners who have observed participants over a period of time following their training (Buchanan, 1964b; Morton, 1965) tend to confirm the following observations by Winn (1968:6-7):

> "From 1961 to 1965, laboratory education in Alcan: Canada was by and large limited to stranger and . . . cousin T-groups. . . . It is true that there were some dramatic instances of successful transfer into the organizational system. But if one listens to the participants, weeks or months after their return from the laboratory, one is stuck by their prevailing references to family life. They are quite articulate in their descriptions of how the laboratory experience affected their relationships with their sons or their wives; they talk about their feelings of greater freedom to experiment within their families, of making decisions, of the lessened feeling of guilt, in short, of the rediscovery of joy in the

family relationships. *An effective work team, however, does not automatically develop just because most or all of its members participated in a stranger or [cousin] lab.*

Another factor impeding the effectiveness of stranger and cousin training as a means of improving job performance is the kind of learning such training produces. In a recent review Buchanan (in press) categorized outcomes as follows: (a) reduced extreme behavior: very dominant people became less dominant, very submissive ones became more assertive, etc.; (b) increased openness, awareness, sensitivity, and tolerance for differences; (c) increased operational skills such as more effective listening, encouraging the participation of others, use of new techniques, etc.; and (d) change in the importance given to emotional factors in work relations. While these outcomes are quite compatible with the goals of laboratory training, it is easy to see that such changes, even if of great magnitude and even if attained by a sizeable proportion of the members of an organization (in several instances all of the supervisors and staff specialists from all levels of a plant participated in cousin laboratories [Buchanan, 1964a; Blake and Mouton, 1964]), would not, without further planned improvement effort, be likely to result in major changes in the functioning of the organization. And in most of the studies on which evidence of change is based there is little indication of the magnitude of a change, the frequency or consistency with which it occurs, or of the importance of the situation in which it is displayed.

Because of their awareness of these limitations of laboratory—or any other—training some practitioners recognized that while such training was important it was clearly not enough, and they began exploring ways of overcoming the limitations. One new approach was taken by Tannenbaum. In 1951 he began conducting weekly sensitivity training sessions with the manager and all other supervisors and key staff members of a department in a large government research organization. As Tannebaum, *et al.*, (1954:4) state in describing what was then a pioneering work,

> "Leadership training groups can be vertically structured without receiving sensitivity training, and they can receive sensitivity training without being vertically structured. *The suggested approach . . . combines these two features* in order to focus sensitivity training on those interpersonal problems which intimately involve the members of the training group in their on-the-job relations and more adequately to insure that the impact of the training will be carried over to the work situation."

These writers elaborated on their method of conducting such training in a later paper (Kallejian, *et al.*, 1955). Since then, team development has become widely practiced in industry, and Clark (undated) has recently presented an insightful analysis of the organizational conditions which make the use of "task team therapy" relevant. He also states in detail the method that he uses in conducting such training. Clark focuses both on problems of person-person relations and on person-task relations. As used by other practitioners team training places less emphasis on person-task issues, but in most, attention is given to interpersonal relations and to operating problems with which the participants are jointly involved (Buchanan and Brunstetter, 1959; Blake and Mouton, 1968; Kuriloff and Atkins, 1966; Morton and Associates, undated).

How effective is team training? On this the available information is not consistent, in part, perhaps, because programs which have been studied varied considerably in design and thus yielded different results. The most positive findings are reported by Morton and Associates (Morton, 1965; Morton and Bass, 1964; Morton and Wight, 1964). They obtained information from a control group and from participants in three two-week laboratories which utilized Morton's version of an "instrumented" training lab (Morton and Associates, undated; Blake and Mouton, 1962). In this type of laboratory there are no trainers in the T-groups; instead, the groups (called D, or, development groups) are given the task of becoming effective as groups. Questionnaires completed, tabulated, and interpreted by the participants are used as a means of feedback, and considerable time is spent in which simulations of organizational problems are used to present dilemmas to the participants. While the participants in all three laboratories of the Morton study were from the same division of a company, the 12 development groups which were formed varied in the extent to which members had close supervisor-subordinate relations on the job. In their assessment study, Morton and Wight compared the 6 groups in which all members had direct authority relations with the 6 in which members did not have such relations. Thus, 6 groups were more like teams as this term is being used here while the other 6 were cousin groups. Analysis of reports of "critical events" obtained from the participants three months following the training (and with a 90 % return of responses) indicated that (1) participants in the teams reported a significantly greater proportion of change than did the members of cousin groups; (2) there were no differences in the proportions of the two sets of groups reporting changes in the area of personal responsibility, such as individual problem-solving, listening, and sensitivity to what was taking place; but (3) those who trained as teams, compared with those who

trained in cousin groups, reported significantly more change in areas where the problems involved interdependency within and between groups. While other conditions undoubtedly contributed to these differences, this study provides some evidence of greater organizational return from team than from cousin training.

Bass, on the other hand, in a laboratory simulation study (Deep, Bass, and Vaughan, 1967), found some support for the hypothesis that task groups whose members received a modified version of T-group training as a group performed less effective than did groups whose members received the same amount of T-group training but in different groups. It is difficult to know how much the discrepancy between these findings and those of Morton are due to methodological differences in the studies.

In the study summarized above, Morton and Wight found that managers trained in teams enountered more barriers to improved problem-solving with people from outside their own department, while those trained in cousin groups fround their greatest barriers within their own departments. This is consistent with a conclusion reached by Harrison in his assessment of a two-week team-development laboratory conducted by Argyris (1962); he found indications of improvement of relations among the participants when they returned to work, but not in their relations with others in the organization. This finding suggests that team training, like individual training, may not produce lasting improvement in organizational performance unless it is part at a change effort involving other interdependent teams.

III. LABORATORY TRAINING IN ORGANIZATION DEVELOPMENT

One example of the use of laboratory training in a program of organization development is the work of Blake and Mouton (1964; 1968). Their "Grid Organization Development" consists of six phases. The first is a one-week "Grid Seminar" in which all management members of the target organization take part on a cousin basis. Dilemmas are presented to the participants who are formed into two or more D-groups, in the form of quizzes covering the theory of leadership presented in the *Managerial Grid,* inter-group competition and cooperation activities, etc. The second phase, undertaken after all members of a given work unit have attended the Grid Seminar, is Team Development in which the main emphasis is on helping each member become aware of his typical managerial practice in terms of "Grid style," and on helping the group identify its typical manner of operating and better ways of functioning (Blake and Mouton, 1968:95-96). The four subsequent phases, with which the key members of the organization are familiar before the program is undertaken ("Intergroup Development," "Design of the Ireal Strategic Model," "Implementation," and "Systematic Critique") build upon the first steps and ensure that the climate, resources, goals, and procedures for attaining "corporate excellence" are available.

While Blake and Mouton have programmed their approach and spelled out the rationale of each phase to a greater extent than have others, the trend among practitioners is to include explicit follow-up activities in a strategy of development which utilizes laboratory training (Beckhard, 1966; Buchanan, 1964b; Clark, undated; Davis, 1967; Friedlander, 1968; Morton and Associates, undated; and Winn, 1968).

One might wonder how the managers of an organization decide to undertake a multi-phased program of organization development.[3] Laboratory training is sometimes used for this purpose in what has been called "seeding" (Blake and Mouton, 1968): selected key members of the potential target organization take part in a stranger laboratory to obtain first-hand information regarding its potential for their organization. Many people in the Presidents and Key Executive Laboratories of NTL, and the Grid Seminars of Blake and Mouton, participate for this purpose.

Still another use of laboratory training is as preparation for team development when there is not the opportunity for all members of the organization to take part in a stranger or cousin laboratory: a few key members of the team attend a stranger or cousin laboratory, the assumption being that what they learn will enable them to help speed up the work done by the team (Buchanan, 1964b; Davis, 1967; Winn, 1966; and Golembiewski and Carrigan, undated).

There is little published information regarding the usefulness of "seeding," but on the basis of my experience and knowledge of the experience of others it appears to be important; a practitioner is on more of a collaborative basis with a client organization if some of its members have first-hand information regarding what they are undertaking if laboratory training is included in an organization development program. Most programs grow out of interests generated as a result of a manager's participation in a stranger laboratory.

Regarding the value of laboratory training as a preparation for team development Winn, who

[3]See Greiner (1967) for an interesting view regarding this issue.

previously espoused it, recently questioned it. In discussing the program at Alcan he noted that "There are as many instances when past T-Group experience triggered off the individual's defenses against an organizational family lab as there were examples when such prior exposure . . . was pertinent and helpful." And Clark (undated) expresses a similar opinion. In contrast I had an experience with two school systems where team development was more effective in one than in the other, and previous experience in laboratory training seemed to be a condition which helped account for the difference (Buchanan, 1968). Each of these views is impressionistic, so the question of the value of these two uses of laboratory training in programs of organization development is not established.

motivation for change (Argyris, 1962; Blake and Mouton, 1968; Buchanan, 1967).

2. It facilitates collaboration among members of the organization by providing a shared frame of reference and a new set of norms (Argyris, 1962; Blake and Mouton, 1968; Buchanan and Brunstetter, 1959; and Davis, 1967).

3. It improves trust, communication, and understanding among members of the organization (Argyris, 1962; Beckhard, 1966; Davis, 1967; Morton, *et al.*, undated). There is reason to believe that all af these functions are critical ones in a strategy of organization development (Buchanan, 1967).

The matrix shown in Table I provides a means for identifying similarities and differences among practitioners regarding what it is important to teach in a training laboratory.

TABLE 1
FRAMEWORK FOR CHARACTERIZING DIFFERENCES IN INTENDED OUTCOMES OF LABORATORIES

Type of learning	*Content of learning* *				
	Feelings	*Authenticity*	*Conflict*	*Power*	*Problem-solving*
Values	A,C,D	A,C,D	A,C,D		A
Skills	A,B,C,M	C,D,M	B,C,D,M	B,D,M	B,M
Theories	A,B,C,D,M	A,C,D,M	A,B,M	B,M	A,B,M

* Letters refer to representatives of different points of view among laboratory training practitioners. Argyris, Blake and Mouton, Clark, Davis, and Morton.

IV. THE USE OF LABORATORY TRAINING AS A PHASE OF ORGANIZATION DEVELOPMENT

In order to assess its contribution as a phase in a multi-phased organization development program it is important to consider the function laboratory training is intended to serve. There appear to be two dimensions to this question. One pertains to the strategic service of what is learned through such training, and the other to what is learned.

With respect to the service the training is expected to perform, there is considerable agreement among practitioners. Most emphasize the following:

1. Participants formulate or come to understand a new "view of the possible" or theory of operating which they see as a desirable mode of behaving. This provides a set of concepts in terms of which current practices within their organization and in their own behavior can be diagnosed. The dissonance which results from comparing the "ideal" with the actual generates

Practitioners differ in the emphasis they place upon changing of values, skills, and theories, and regarding the content of learning. If we take Argyris, Blake and Mouton, Clark, Davis and Morton as representatives of different approaches, then we have the picture as shown in the table. Some statements from the work of these authors will illustrate the basis on which the table was constructed.

Argyris (1962; 1966) describes an important organizational need, and the function of laboratory training, in terms of changes in values. "Re-education in human relations should focus more on a change in basic values than on acquiring skills. The development of valid values will tend to lead automatically to the development of proper skills. . . . Skills follow values; values rarely follow skills." (1962:135).

In reflecting upon their experiences, including their central roles in the organization development program of TRW Systems Company which is one of the more successful ones currently operating (Davis, 1967) Tannenbaum and Davis (1969) state the following:

> In order to achieve a movement toward authenticity, focus must be placed on developing the whole person and in doing this in an organic way. . . . In time, therapy and individual growth . . . become values in and of themselves. And as people become less demotivated and move toward authenticity, they clearly demonstrate that they have the ability to be creative about organizational matters, and this too becomes a value shared within the organization. As these values are introduced and people move towards them in an organization, this movement in and of itself contains many forces that make for change and opens up new possibilities.

The view of Clark is summarized in the following:

> ". . . the way back to fully functioning groups is via changing the group norms about feeling expression (and) is accomplished by changing the here and now expression of both the members' and the task group therapist's feelings." (undated; 20).

And Blake and Mouton state the following: (1969:37-42)

> "Grid Organization Development provides for the . . . learning of concepts and principles of behavior through prework study of *The Managerial Grid* . . . followed by training activity to provide for individuals to acquire skill in applying these concepts and principles to understanding one's own behavior and that of others in problem-solving settings"

> "Intellectual and emotional aspects come together. . . . Managers learn theories of behavior and conduct by acquiring an understanding of the Managerial Grid as an intellectual framework. . . . But . . . Learning takes place under conditions designed to arouse feelings and emotions. An experiential learning strategy is employed to aid an individual, through introspection and feedback, in comprehending his own personal and subjective thoughts and emotions, but in the context of Grid theory."

Analysis of these statements and of the information summarized in the table suggests the following:

1. Argyris, Blake and Mouton, and Morton place more emphasis on teaching participants theory than do Clark or Davis.

2. Argyris, Morton, and Blake and Mouton also place more emphasis on problem-solving, but differ in that Morton and Blake and Mouton (who use instrumented training) give more attention to ways of solving non-interpersonal problems than Argyris does.

3. Argyris, Clark, and Davis emphasize authenticity more than Morton or Blake and Mouton. Authenticity and the expression of feelings are major issues to Argyris, Clark, and Davis in the laboratory phase of organization development. However, Argyris provides the theoretical link between authenticity, feeling expression, and organizational effectiveness while Clark and Davis appear to be more concerned with increased authenticity as a value in its own right: the theory they present as part of the training design deals mostly with intra-personal and interpersonal relations.

4. Like Argyris, Morton and Blake and Mouton emphasize theory relating to organization functioning, but they differ in the kind of theory presented to participants. Blake and Mouton focus only on the Managerial Grid theory while Morton encourages participants to generate their own theory (Morton and Bass, 1964).

How effective is laboratory training in fulfilling the strategic functions listed above, and which of the specific views presented are most effective? Unfortunately, too little information is available to provide answers, but the following seems relevant:

1. There is reason to believe that laboratory training has been used successfully in accomplishing the three strategic functions mentioned (Blake, *et al.*, 1964; Buchanan and Brunstetter, 1959; Buchanan, 1964a,b; Davis, 1967; Morton and Wight, 1964; Underwood, 1968).

2. However, such training clearly is not essential to the success of a program in organization development (Buchanan, 1967).

3. The only study known to the writer in which laboratory training was compared with other methods of organization development provided some evidence in favor of the one which included laboratory training when viewed from the long term perspective (Argyris, 1965; Likert, 1967).

4. Recently Blake and Mouton (1969) made an analysis of Grid and "T-Group-consultant" approaches, in which they made no distinctions among different "T-Group-consultants". They considered how each approach met the conditions of six propositions regarding organization development. They concluded that the Grid approach was more effective on each proposition. To my knowledge there have been no empirical studies comparing organizational development projects utilizing laboratory training with different emphases; but in a program of manager development, cited above, Morton and Wight found some evidence that instrumented training was more effective than sensitivity training.

IV. SUMMARY AND CONCLUSIONS

One can summarize this analysis of the use of laboratory, or sensitivity, training in industrial organizations as follows:

1. It has been used effectively as a means of manager development.

2. It has been used as team development. When used in this form without follow-up it seems to have considerable impact upon the participants, including their subsequent working relations with each other, but little positive impact upon their relations with other parts of the organization.

3. When key individuals of a work team take part in a stranger or cousin laboratory as a way of speeding up team development there is conflicting evidence, largely impressionistic, as to whether the subsequent team development is different from that in which members did not take part in stranger or cousin laboratory training.

4. It appears to be effective as a means of familiarizing a few members of a client organization with the potential of using laboratory training as one phase of organizational development.

5. Rather convincing rationales have been presented for the use of each of several different forms of laboratory training as a phase in an organizational development program. Empirical evidence regarding the relative impact of the different forms (Blake and Mouton's Grid seminars, Morton's instrumented training, Clark's form of sensitivity training, etc.) is very sparce, with the only one dealing with the question providing weak indication that Morton's form of instrumented training was more effective than was a form of sensitivity training. As a part of organizational development programs laboratory training seems to contribute to (a) the development of a "view of the possible" and thus of motivation to change, (b) improved collaboration among members of the organization, and (c) improved trust, communication, and understanding among members of the organization—thus setting the stage for effective problem analysis and problem solving.

If laboratory training is to advance as an application of behavioral science in the improvement of the functioning of industrial (and other) organizations there is urgent need for two types of studies. One type would compare the effectiveness of different forms of laboratory training in accomplishing specified organizational development functions. The other type would compare the best form of laboratory training with other methods (systematic problem solving, data-feedback, etc.) of accomplishing the same organizational development functions. To date well-designed studies of both sorts are lacking, the exceptions being the Morton and Wight comparison of two forms of laboratory training and the Morse and Reimer comparison of group-oriented laboratory training and an industrial engineering type of change. The paucity of either type of study attests to the difficulty of conducting them.

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